

COMPRESSOR DEFINITION

Designation	NE K6165GK
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	957IG71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115 / 60	[V / Hz]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°F)	
5 Motor type	CSIR		
6 Starting torque	HST - Hight starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm ²] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm ²] (408 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/3	[hp]
2 Displacement	6.20	[cm ³] (0.378 cu.in)
2.1 Bore [mm]	20.873	
2.2 Stroke [mm]	18.120	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	10.4	[kg] (22.93 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-57	
3 Start capacitor	145-175(165)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0060/G9	
6 Start winding resistance	6.14	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.24	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	26.50	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	5.60	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @100V50Hz			ASHRAEHBP46 Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°F) 54.4°C (129.92°F)	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
3354	845	983	498	5.24	27.61	6.73	1.70	1.97

E - PERFORMANCE - CURVES

TEST CONDITIONS: @100V60Hz			ASHRAE46 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	1936	488	567	313	4.08	12.29	6.17	1.55	1.81
-15	(+ 5)	2314	583	678	342	4.36	14.78	6.78	1.71	1.99
-10	(+14)	2793	704	819	370	4.61	17.94	7.57	1.91	2.22
-5	(+23)	3376	851	989	397	4.86	21.84	8.51	2.14	2.49
0	(+32)	4061	1023	1190	424	5.09	26.50	9.59	2.42	2.81
+5	(+41)	4848	1222	1421	450	5.30	31.97	10.78	2.72	3.16
+10	(+50)	5738	1446	1681	475	5.50	38.30	12.07	3.04	3.54

TEST CONDITIONS: @100V60Hz			ASHRAE46 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	1656	417	485	332	4.27	11.60	5.00	1.26	1.46
-15	(+ 5)	2000	504	586	369	4.54	14.10	5.42	1.37	1.59
-10	(+14)	2431	613	712	405	4.80	17.26	5.99	1.51	1.75
-5	(+23)	2950	743	864	441	5.07	21.11	6.67	1.68	1.95
0	(+32)	3556	896	1042	477	5.33	25.69	7.45	1.88	2.18
+5	(+41)	4250	1071	1245	511	5.60	31.06	8.32	2.10	2.44
+10	(+50)	5031	1268	1474	545	5.86	37.25	9.25	2.33	2.71

TEST CONDITIONS: @100V60Hz			ASHRAE46 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	1434	361	420	356	4.47	11.28	4.03	1.02	1.18
-15	(+ 5)	1730	436	507	398	4.74	13.70	4.34	1.09	1.27
-10	(+14)	2099	529	615	441	5.03	16.74	4.76	1.20	1.39
-5	(+23)	2540	640	744	483	5.32	20.44	5.26	1.33	1.54
0	(+32)	3053	769	895	524	5.63	24.86	5.83	1.47	1.71
+5	(+41)	3639	917	1066	565	5.96	30.02	6.44	1.62	1.89
+10	(+50)	4297	1083	1259	606	6.30	35.97	7.08	1.79	2.08

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.03 +0.07/+0.00	[mm]	(0.316" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		